

EPA Region 10  
Deemed Releasable

R405

## Condition History

Unit	90COGEN - COGEN Unit
FLOC	90NAH2004-20-FLOC - AMMONIA LIQUID TO VAPORIZER
Equipment	90NAH2004-20 - AMMONIA LIQUID TO VAPORIZER
Legal Reg	
Reg Agency	
Shell Reg Number	
ECH Description	EXTERNAL
Status	FINAL APPROVAL

## Details for 90NAH2004-20

Equipment Group	PIPE	Resp Inspector	RN
Serial number		Resp Insp Full Name	Nielson, Robert SOPUS-DMW/464
Manufacturer		Last Approved By	Nielson, Robert SOPUS-DMW/464
Current Event	INSPECTION RECOMMENDATION	Condition Date	19/Aug/2015

## Schedules Created

Schedule	Schedule date	Description
INSP00233247	19/Aug/2020	EXTERNAL

## Schedules Credited

Schedule	Schedule date	Description
INSP00229470	23/Sep/2015	EXTERNAL

## Inspection Data

Component	Damage Mechanism	Failure Mode	Template
GENERAL	No Damage Mechanism	No Failure Mode	EXTERNAL INSPECTION

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## Condition History

Type	Category	Spec name	Qualifier	Value	UoM
ACTIONS PERFORMED	PIPE	VISUAL		YES	
ACTIONS PERFORMED	SUPPORTS/HANGERS	VISUAL		YES	
ACTIONS PERFORMED	VALVES	VISUAL		YES	

### Narrative ECH

A visual external inspection was performed on this piping system using Shell PSR visual on-stream external piping inspection checklist as a guide. This pipe was insulated with no major damage to the jacket. Hangers and pipe shoes were in place and in good functional condition. All criteria was met with no unserviceable conditions or repair need at this time. ROBERT NIELSEN API# 49292

#### A.1 LEAKS

- EXISTING CLAMPS N/A
- INJECTED BONNETS N/A
- PROCESS None
- STEAM TRACING None

#### A.2 MISALIGNMENT

- EXPANSION JOINT MISALIGNMENT N/A
- PIPING MISALIGNMENT/RESTRICTED MOVEMENT N/A

#### A.3 VIBRATION

- EXCESSIVE OVERHUNG WEIGHT None
- FLEX HOSE CONDITION None
- INADEQUATE SUPPORT Acceptable
- LOOSE SUPPORTS CAUSING METAL WEAR None
- THIN, SMALL BORE, OR ALLOY PIPING Acceptable
- THREADED CONNECTIONS Acceptable

#### A.4 SUPPORTS

- BOTTOMED OUT SPRINGS N/A
- BRACE DISTORTION/BREAKAGE Acceptable
- COUNTERBALANCE CONDITION N/A
- HANGER DISTORTION/BREAKAGE Acceptable
- LOOSE BRACKETS None
- SHOES/STANDS CONDITION Acceptable

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## Condition History

- SLIDE PLATES/ROLLERS Acceptable
- SUPPORT CORROSION Acceptable
- INTERNAL CORROSION AT DUMMY LEG TO PIPE ID (REQUEST RT IF CORROSION OBSERVED) Acceptable
- ADD CML AT ALL DUMMY SUPPORT TO PIPE IDs N/A

### A.5 CORROSION

- BOLTING SUPPORT POINTS UNDER CLAMPS N/A
- BOLTING/GASKETS CORRODED? Acceptable
- COATING/PAINTING DETERIORATION Acceptable
- OXIDATION/SCALE Acceptable
- PITTING None
- SOIL TO AIR INTERFACES N/A

### A.6 INSULATION

- BANDING (BROKEN/MISSING) Acceptable
- BIOLOGICAL GROWTH None
- BULGING Acceptable
- DAMAGE/PENETRATIONS Acceptable
- INSULATION INTERFACES Acceptable
- MISSING JACKETING/INSULATION Acceptable
- SEALING DETERIORATED/MISSING Acceptable
- WATER/MOISTURE PRESENT? Acceptable

### Inspection Scope - Plan

### Equipment Strategy

### Attachments

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05810003



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